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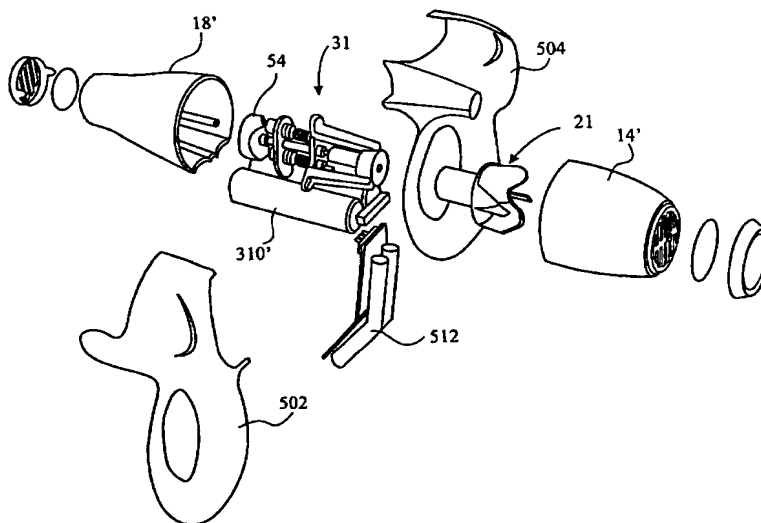
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(54) Title: HAIRDRYER



(57) Abstract: A hairdryer (10) has a housing (12, 16, 18) defining an air passage (26) and a cartridge receptacle (516). A battery (308, 512) is adapted to power a motor (20) driving a fan (22). A manifold (570) connects two gas canisters (310), in a canister cartridge (310'), to a conduit (596) to provide combustible gas flow to the burner (34). Electronic control means pulses the solenoid (592) between on and off positions of the valve (586). The control means provides for at least three modes of operation - on, off and cool shot. The canisters and an end cap (526) keep them together. When the cartridge is inserted, couplings (534, 536) on the cap and body engage and the outlet valves of the canisters are opened by valve openers (58) in the manifold. The body comprises two cup elements (14', 18') and has a depending pistol-grip handle comprising two clamshells (502, 504).



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,  
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB 03/05343

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A45D20/06 B25F5/02 F17C13/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A45D B25F F17C F24H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 170 705 A (E. D BISHOP) 13 August 1986 (1986-08-13) page 2, line 4 - line 33; figure 2	1-3
Y		5,6
A		10
X	US 5 857 262 A (BONNEMA JAMES ET AL) 12 January 1999 (1999-01-12) abstract; figure 2	4,7,13
Y	column 6, line 6 - line 26 column 4, line 38 - column 5, line 7	5,6,8,10
Y	US 4 995 171 A (YOSHINAGA SADA O ET AL) 26 February 1991 (1991-02-26) abstract; figure 3 column 4, line 24 - line 44	8
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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\*A\* document defining the general state of the art which is not considered to be of particular relevance

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\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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\*Z\* document member of the same patent family

Date of the actual completion of the international search

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10 NOV 2004

Name and mailing address of the ISA

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# INTERNATIONAL SEARCH REPORT

International Application No.  
GB 03/05343

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 03/047387 A (SUNDERLAND JOSEPH WILLIAM ;COLLIER NICHOLAS (GB); SUNDERLAND BLACK) 12 June 2003 (2003-06-12) page 10, line 12 - line 22 page 11, line 16 - line 24; figures 3,4 page 13, line 1 - line 12; figure 6	1-6,13
P,A		12,14
Y	US 5 009 592 A (ROLDAN ANTOINE ET AL) 23 April 1991 (1991-04-23)	9,10,21
A	column 4, line 37 - line 59; figures 1,6	11
Y	FR 2 642 142 A (BUTAGAZ) 27 July 1990 (1990-07-27)	9,10,21
A	page 2, line 9 - line 38 page 4, line 1 - line 12 page 6, line 3 - line 36; figures 2,5	11
A	US 4 711 988 A (YIP P C ET AL) 8 December 1987 (1987-12-08) column 2, line 54 - column 3, line 21; figure 1	1,2,5
A	GB 2 254 913 A (EDWARDS ANTHONY MICHAEL) 21 October 1992 (1992-10-21) page 2, last paragraph - page 3, paragraph 1; figure 1	9,21
A	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 08, 29 September 1995 (1995-09-29) & JP 7 116016 A (MATSUSHITA ELECTRIC WORKS LTD), 9 May 1995 (1995-05-09) abstract; figure 1	12
A	US 5 155 925 A (CHOI WONCHOEL) 20 October 1992 (1992-10-20) abstract; figure 1	12
A	US 3 161 322 A (STONE ARTHUR H) 15 December 1964 (1964-12-15) column 1, line 14 - column 19; figures 1,2	21

# INTERNATIONAL SEARCH REPORT

ational application No.  
PCT/GB 03/05343

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:  
1-14, 21; 19 and 20 as far as dependent on 1-14
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International Application No. PCT/ GB 03 /05343

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8; 13 and 14 as far as dependent on 1-8

Hairdryer with control of the gas flow. Claim 4 is regarded as the broadest independent claim of this group.

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2. claims: 9-14, 21; 19 and 20 as far as dependent on 9-14

Gas cartridge for a hairdryer. Claim 21 is regarded as the broadest independent claim of this group.

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3. claims: 15-20

Housing for a handheld portable implement.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

GB 03/05343

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